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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dennis Roy Mullins

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07/29/2004

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EXAMINER

NGUYEN, JOSEPH D

ART UNIT

PAPER NUMBER

2683

8

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,734

Applicant(s)

MULLINS, DENNIS ROY

Examiner

Joseph D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, and 8 are objected to because of the following informalities:

Regarding claim 1, in line 5 the word "indicating" is misspelling. Appropriate correction is required.

Regarding claim 8, in line 14 the word "receivedfrom" need to change to "received from".

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 8, in line 2, the term "operating a third switch node allocation mode", in line 12 the term "operating a third switch node allocation mode", and in line 19 the term "operating a third switch node allocation mode" are not disclosed in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindvall et al. (6,418,314) in view of Goerke (6,201,967).

Regarding claim 1, Lindvall et al. discloses a method of registering a satellite telephony user terminal with a system comprising one or more earth stations for communication with said user terminal via one or more switch nodes interconnected therewith by a terrestrial network (abstract, fig. 2A); the method comprising;

a) storing terminal data for each terminal indicating a switch node allocation mode for the terminal (#340 fig. 3A), control data which is not based upon the dialed number, specifying a switch node to be used for communication with that terminal (#350 fig. 3A, col. 6 lines 11-55); and

allocating that switch node as the node via which calls to and from the user terminal should be directed using the terminal data and the control data (fig. 3A-3B, col. 6 line 56 thru col. 7 line 27, and col. 7 line 53 thru col. 8 line 2). However, Lindvall et al. does not specifically disclose indicating a switch node and allocating the switch node as the node via which call to and from the user terminal.

Goerke teaches indicating a switch node and allocating the switch node as the node via which call to and from the user terminal (fig. 8b, col. 5 line 28 thru col. 6 line 5).

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Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Lindvall et al. system with the teaching of Goerke of indicating a switch node and allocating the switch node as the node via which call to and from the user terminal in order to identify the user terminal and to allocate the serving node for the mobile terminal and for the billing purpose.

Regarding claim 2, Lindvall et al. further discloses the method of claim 1, further comprising sending (transmitting or communicating), to the terminal, said control data to be retransmitted therefrom in future, said control data depending upon (abstract, fig. 3A-B). However, Lindvall et al. does not specifically disclose control data to be retransmitted therefrom in future. But it would have been obvious to one ordinary skilled in the art that the terminal transmits the previous registration information every time it is triggered for location update which means control data to be retransmitted therefrom in future.

Regarding claim 3, Lindvall et al. further discloses the method of claim 1, further comprising; determining whether said data is present, and if not (invalidating to determining the invalid) (col. 12 line 61 thru col. 13 line 20).

Regarding claim 4, Lindvall et al. further discloses the method of claim 3, further comprising, in a first allocation mode (previous servicing spot beam) (col. 13 lines 1-4); and determining the position (location) of said user terminal (col. 12 line 61 thru col. 13 line 45); and allocating (designating) a said switch node on the basis of said position and that of the switch nodes (fig. 3A-3B, col. 6 line 56 thru col. 7 line 27, and col. 7 line 53 thru col. 8 line 2).

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Regarding claim 5, Lindvall et al. further discloses the method of claim 1, in which the control data comprises; an indication of the last (previous) switch node allocated to said user terminal (#350 fig. 3A, and col. 9 lines 10-25).

Regarding claim 6, Lindvall et al. further discloses the method of claim 1, in which the control data comprises; an indication of whether the last switch node (previous) allocated to said user terminal should be used again or not (fig. 3A-B, col. 10 lines 8-18, and col. 11 lines 44-55).

Regarding claim 7, Lindvall et al. further discloses the method of claim 1, further comprising the steps of,

a) receiving, from the terminal, data indicative of the identity of the user or the user terminal (registration information and LAI) (#310 fig. 3A, col. 8 lines 54-64);

b) determining therefrom a switch node to be used for communication with that terminal (col. 8 lines 35 thru col. 9 line 9); and

c) allocating that switch node as the node via which calls to and from the user terminal should be directed (fig. 3A-3B, col. 6 line 56 thru col. 7 line 27, and col. 7 line 53 thru col. 8 line 2). However, Lindvall et al. does not specifically discloses the identity of the user terminal and switch node.

Goerke teaches the identity of the user terminal and switch node (col. 7 line 66 thru col. 8 line 22). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Lindvall et al. system with the teaching of Goerke of the identity of the user terminal and switch node in order to

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identify the user terminal and to allocate the serving node for the mobile terminal and for the billing purpose.

Regarding claim 9, Lindvall et al. further discloses a method according to claim 1, in which the one or more satellites comprise a constellation of satellites in non-geostationary orbits (#235 fig. 2A, col. 7 lines 11-27).

Regarding claim 10, Lindvall et al. discloses a user terminal for a satellite communications system, said terminal being operable to transmit control data which is not based upon the dialed number, specifying a switch node to be used for communication with that terminal, said data being indicative of the identity of said switch node (LAI) and not of the identity of the user or the user terminal (abstract, fig. 2A-3B, col. 6 lines 10-55). However, Lindvall et al. does not specifically disclose indicative of the identity of said switch node.

Goerke teaches indicative of the identity of said switch node (col. 6 line 15-41). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Lindvall et al. system with the teaching of Goerke of indicating a switch node in order to identify the user terminal and to allocate the serving node for the mobile terminal and for the billing purpose.

Regarding claim 11, Lindvall et al. further discloses a user terminal according to claim 10, which is arranged to receive of said control data, store said control data, and subsequently to transmit said stored control data (col. 13 lines 38-45).

Regarding claim 12, Lindvall et al. discloses a network control component of a mobile satellite communications system comprising one or more earth stations for

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communication with a satellite telephony user terminal via one or more satellites and one or more switch nodes interconnected therewith by a terrestrial network; said component being operable to register a said user terminal with said system (abstract, fig. 2A); the component comprising:

a) means for receiving, from the terminal, control data which is not based upon the dialled number), specifying a switch node to be used for communication with that terminal (col. 8 lines 54-64); and

b) means for allocating that switch node as the node via which calls to and from the user (fig. 3A-3B, col. 6 line 56 thru col. 7 line 27, and col. 7 line 53 thru col. 8 line 2). However, Lindvall et al. does not specifically disclose the identity of the user terminal. But it would have been obvious to one skilled in the art that the information registration always verified to identity of the user terminal in order to charge or bill.

Regarding claim 13, Lindvall et al. further discloses the component of claim 12, which comprises one of said earth stations (#205 fig. 2A, col. 10 lines 35-44).

Regarding claim 14, Lindvall et al. further discloses the component of claim 12, which further comprises one of said switch nodes (LAI) (col. 9 lines 39-40).

Regarding claim 15, a satellite system network component (fig. 2A) for performing the process of claim 1.

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

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Or faxed to:

703 308-9051, (for formal communication intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label

"PROPOSED" OR "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA. Sixth floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen



Jul. 22, 2004



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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